Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (currently amended): A control method for compensating changes in an SRS-Induced Power Exchange when connecting channels into, and disconnecting channels from, an optical data transmission path of a WDM system having a tilting control via at least one fiber amplifier, the method comprising the steps of:

providing at least two tilt control units which operate at different speeds to set tilting of a spectrum of data signals in the optical data transmission path;

measuring a change in overall power in the optical data transmission path via a quicker operating tilt control unit of the at least two tilt control units, the quicker operating tilt control unit being connected to at least one filling light source for supplying light energy to said~~pumping a transmission fiber of the~~ optical data transmission path, the wavelength of the at least one filling light source lies within a transmission useable wavelength band; and

immediately compensating the tilting ~~using Raman effect~~ by changing the power of the at least one filling light source via said quicker operating tilt control unit; and~~, then~~

returning the power of the at least one filling light source gradually in the direction of an original state existing before the change in overall power ~~using a slower operating control unit of the at least two control units~~via a slower operating tilt control unit of said at least two tilt control units and at the same time adapting the tilting control provided by said at least one fiber amplifier via said slower operating tilt control unit.

Claim 2 (previously presented): A control method for compensating changes in an SRS-Induced Power Exchange as claimed in Claim 1, the method further comprising the step of:

incorporating a time delay in the signal in the optical data transmission path between measurement of the overall power and injection of the at least one filling light source.

Claim 3. (original): A control method for compensating changes in an SRS-Induced Power Exchange as claimed in Claim 1, the method further comprising the steps of:

providing a controllable filter, wherein the influencing of the tilting of the spectrum is additionally performed by the controllable filter.

Claim 4. (original): A control method for compensating changes in an SRS-Induced Power Exchange as claimed in Claim 1, further comprising:

power-controlled EDFA, wherein the influencing of the tilting of the spectrum is at least additionally performed by the power-controlled EDFA.

Claim 5. (cancelled)

Claim 6. (previously presented): A control method for compensating changes in an SRS-Induced Power Exchange as claimed in Claim 1, wherein the at least one injected filled light source is injected at a start of the optical data transmission path.

Claim 7. (previously presented): A control method for compensating changes in an SRS-Induced Power Exchange as claimed in Claim 1, wherein the at least one injected filled light source is injected at an end of the optical data transmission path and counter to a direction of transmission.

Claims 8-16. (canceled).

Claim 17. (previously presented): A control method for compensating changes in an SRS-Induced Power Exchange as claimed in Claim 1, wherein the at least one slower operating control unit comprises a slow EDFA control unit connected to at least one pump source of a doped fiber.

Claim 18. (canceled)

Claim 19. (currently amended): A control apparatus for compensating changes in an SRS-Induced Power Exchange when connecting channels into, and disconnecting channels from, an optical data transmission path of a WDM system having a tilting control via at least one fiber amplifyer, comprising:

at least one filling light source for ~~pumping a transmission fiber of the~~supplying light energy to said optical data transmission path, the wavelength of the at least one filling light source being within a transmission useable wavelength band;

at least two tilt control units which operate at different speeds to set tilting of a spectrum of data signals in the optical data transmission path;

parts for measuring a change in overall power in the optical data transmission path via a quicker operating tilt control unit of the at least two tilt control units, the quicker operating tilt control unit being connected to at least one filling light source; and

parts for immediately compensating the tilting ~~using Raman effect~~ by changing the power of the at least one filling light source via said quicker operating tilt control unit, then returning the power of the at least one filling light source gradually in the direction of an original state existing before the change in overall power ~~using a slower operating control unit of the at least two control units~~via a slower operating tilt control unit of said at least two tilt control units, and at the same time adapting the tilting control provided by said at least one fiber amplifier via said slower operating tilt control unit

Claim 20. (previously presented) The control apparatus as claimed in Claim 19, wherein both the parts for measuring a change in overall power and the at least one filling light source are arranged at a beginning of the at least one path section.

Claim 21. (previously presented): The control apparatus as claimed in Claim 19, further comprising:

a delay element provided between the parts for measuring a change in overall power and the at least one filling light source.

Claim 22. (previously presented): The control apparatus as claimed in Claim 21, wherein the delay element is selected from the group consisting of a dispersion-compensating fiber, a fiber with low dispersion, and a fiber doped with a rare earth element.

Claim 23. (previously presented): The control apparatus as claimed in Claim 19, wherein the at least one filling light source has a single frequency.

Claim 24. (previously presented): The control apparatus as claimed in Claim 19, wherein the parts for immediately compensating the tilting comprise frequency-dependent filters which can be controlled for compensating the tilting.

Claim 25. (previously presented): The control apparatus as claimed in Claim 19, further comprising power-controlled EDFA for compensating the tilting.

Claim 26. (previously presented): The control apparatus as claimed in Claim 19, further comprising at least one element, which is one of a filter and an amplifier, with a respective frequency-dependent transmission characteristic and a game characteristic, as well as downstream overall intensity meters, including an evaluation unit for determining the tilting.

Claim 27. (previously presented): The control apparatus as claimed in Claim 19, further comprising a slow power-controlled EDFA connected to at least one pump source of a doped fiber.